

# Report

FOR THE YEAR 1906,

PRESENTED TO THE

## Spilsby Rural District Council,

BY

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SPILSBY:

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TO THE

# Spilsby Rural District Council.



GENTLEMEN,

As your Medical Officer of Health I beg to lay before you my Report for the year ending December 31st, 1906.

Infectious Diseases have again been prevalent in the district during the year, the number of notifications received being practically the same as that of last year, those of Scarlet Fever and Diphtheria being again the most numerous. The Birth-rate is slightly above and the Death-rate slightly below the average of the last ten years, and the infant mortality is low.

I shall, as usual, divide my report under the headings of Epidemic Diseases, Sanitary Work, and Vital Statistics.

## EPIDEMIC DISEASES.

MEASLES.—This disease has given very little trouble during the year, since there have been only two outbreaks, and in both instances the primary case was imported into the district. In March the disease showed itself in Sloothby, the first discoverable case being that of a pupil teacher who was attending the Central Classes at Louth. In July the second outbreak occurred in Partney, and was brought about by a child coming from Yarmouth to visit in the village, and who manifested the disease a few days after arrival. No death was returned under this heading.

SCARLET FEVER.—This complaint is generally the most troublesome of all the infectious fevers, and 1906 has proved no exception to the rule. No less than 70 notifications have been received, and this does not fully represent the total number occurring, as on account of the mildness of the attack, I am sure many cases escape detection. This disease appears to be altering very much in severity from what it was a few generations ago, but this fact only increases the difficulty of stamping it out, as so many cases are liable to be overlooked. Several times during the last few years, on investigating an outbreak, I have been able to trace it back six weeks or even two months, and if these cases had only come under our knowledge earlier, a large number of subsequent ones would have probably

been prevented. Thirty-three out of these seventy notifications related to cases occurring in Little Steeping. The disease existed in that village from May to December, and I have very little doubt but that its frequent reappearance was due to some of these mild and unrecognised cases. The only other real outbreak occurred at Orby, and although not many notifications were received, still the disease has hung about the village since early in November. Only one death took place, that of a child aged 9, at Thorpe.

WHOOPING COUGH.—In February this disease was prevalent in Burgh, and caused three deaths of children each under two years of age. In March it had spread to the neighbouring villages of Orby and Welton, but by the end of April nothing more was heard of it.

DIPHTHERIA.—Of this disease thirty-one cases have been notified. Seven of these were imported from outside the district, seven occurred at Well, six in one house at Willoughby, and the remainder were for the most part solitary. The Well outbreak took place in March, and was confined to the dwellers in two houses, the children from which were attending the schools at Alford, and diphtheria was I believe present in that town at the time. One child aged 2 years died. In October a virulent outbreak occurred at Willoughby, and resulted in three deaths. On September 24th, I received a

notification that a boy named George Hill, of that village was suffering from diphtheria, and during the next ten days two brothers, a sister, and his mother fell ill with the same complaint. The husband was in a delicate state of health and quite unfitted to look after the patients, so a nurse was procured, but she unfortunately after being there only a few days caught the disease. Two nurses had now to be obtained, and the people living under the same roof were prevailed upon to leave and give up their house which was made available as accommodation for the nurses. The disease was evidently of a very virulent type, for by October 15th three out of the four children had died, and the mother, remaining child, and nurse were very ill, but eventually recovered. The other fatal case was that of a girl at Burgh, aged 14, who came from Louth on November 16th, was taken ill on November 18th, and died on November 21st.

ENTERIC FEVER.—Seven cases have been notified and, with the exception of the last two, they were mild and isolated. The first patient was a child living in an outlying part of the parish of Langton, and no cause could be definitely ascribed to the origin of the disease. The second occurred at Thorpe. The sanitary arrangements were quite satisfactory, and the water supply was brought by train from Willoughby. In September a solitary case occurred at Ashby, and a similar one at Sausthorpe in October. In November two cases

shewed themselves in one house in Stickney, the disease having been imported from Mansfield.

PUERPERAL FEVER.—I received notification of a patient suffering from this disease at Bilsby, in November. She was eventually removed to the Spilsby Union Infirmary, and after a lingering illness died.

INFLUENZA.—Although present to a certain extent during the year, this disease never assumed a serious epidemic form, and only one death was registered under this heading.

In June some peculiar illness broke out in Sken-dleby, principally amongst children. During that month 22 children and 2 adults were ill with very similar symptoms. They were fever, headache, sore throat, enlarged cervical glands, severe ear-ache, and in some discharge of pus from one or both ears. In three cases a rash was seen which consisted of a few red spots principally upon the neck. No desquamation was noticed and no death occurred, but some of the children were ill for several weeks. The disease did not spread beyond the village, and it was limited principally to children between the ages of 2 and 13. The symptoms of this complaint did not tally with those of any of the well known specific fevers, and I am quite unable to give it a name. At the time of the outbreak a special report was sent to the Local Government Board and the Lindsey County Council.

In July I received notification from the Inspector of the Local Authority under the Diseases of Animals Act, that there was one fatal case of Anthrax at Huttoft. On enquiry I found that a bull was bought at Lincoln Fair and died on June 25th in a field, and although no cause of death was discovered, the carcase was not used for food. On July 3rd a heifer was found dead in an adjoining field, and the body having been examined by a Veterinary Surgeon the cause of death was found to be Anthrax. This animal was covered with disinfectants and cremated in the field on the spot where it had died, and the ground around was subsequently burnt. On November 1st a number of beast were brought into the field in which the bull had died, and on November 6th one of these was found dead, the cause of death being certified as Anthrax. This carcase was not removed, but was covered with disinfectants and cremated. This second outbreak in November shows the long continuance of vitality in the infecting germs of this disease, and also points to the importance of ascertaining the exact cause of death in suspicious cases and of the stringent carrying out of all remedies calculated to prevent its spread. Happily no human being received contamination from these dead animals.

The number of notifications received during 1906 was 119, a number slightly above the average of the last ten years. Their distribution under their

several headings will be seen in the following table :—

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Membranous Group.	Typhus Fever.	Enteric or Typhoid Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Total.
1897	27	26			7					9	69	
1898	8	19	1		6	1		1		17	53	
1899	37	19			13			1		14	84	
1900	71	9			5			1		21	107	
1901	44	41			10			1		7	103	
1902	1	175	12		3	1				9	201	
1903		59	13		4					8	84	
1904		42	18		6					11	77	
1905	3	71	16		9			1		10	110	
1906		70	31		7			1		10	119	

## SANITARY WORK.

Towards the end of 1905, a movement was set on foot to construct water works for Wainfleet, the supply to be obtained from the Steeping River as it flows through the town. At the request of the Local Government Board a special report on that subject was presented to your Council, and in it it was stated that the drainage of a portion of Spilsby eventually flowed into that river at a point seven and a half miles above Wainfleet, and that there were also many other minor sources of pollution falling into the stream at various points. An analysis of the water taken from the river in Wainfleet was made on two occasions, but unfortunately with very different results. In one case the water was described as "decidedly polluted and unfit for drinking," and in the other as "of moderate organic purity and fairly good for drinking purposes." Subsequent to these reports your late Sanitary Inspector was asked to present various schemes for so diverting or purifying the effluent of the Spilsby drainage as not to pollute in any way the water in the Steeping River. Three schemes were placed before the Council, but none of them met with approval, and Messrs. Walker & Son, Engineers, from Nottingham, have since been consulted, and the Council now awaits their recommendations. It was also found that a certain amount of pollution running into the river was from a part of the village of Hundleby, and this too

is to be reported upon by Messrs. Walker & Son.

In my last report I alluded to the unsatisfactory state of the drainage of Sutton, and urged the necessity for its immediate improvement. I am sorry to find that although many meetings have been held for the purpose, many schemes advocated, and many consultations taken place with engineers such as Professor Henry Robinson, M. Inst. C.E., of London, and Messrs. Herbert Walker & Son, M.M. Inst. C.E., of Nottingham, no definite plan of drainage has been agreed upon, and consequently another summer will be upon us before any improvement has taken place. The complete installation of a new system of sewerage for any place is a serious matter and one entailing a good deal of consideration and expense, but as far as Sutton is concerned the matter must be taken seriously in hand if the inhabitants wish to see their village increase or even hold its own as a popular seaside resort.

The following is the Surveyor and Inspector's Report for 1906:—

Number of nuisances reported ... ... ...	60
Number abated without formal notice ... ...	39
Number of formal notices served ... ...	21
Total number abated ... ... ...	60
Houses reported unfit for human habitation ...	1
Houses placed in habitable repair ... ..	1
New drainage to houses ... ... ...	5
Defective drainage to houses remedied ... ...	24

Houses cleansed and disinfected ... ... ...	43
New earth closets erected ... ... ...	4
Privy vaults filled in and earth closets inserted ...	5
New water closets erected ... ... ...	11
Water closets repaired and ventilated ... ...	2
New dust bins erected ... ... ...	1
Old dust bins repaired and covered in ... ...	4
Cases of overcrowding reported ... ... ...	3
Cases of overcrowding abated ... ... ...	3
Common lodging-houses inspected ... ... ...	1
Schools cleansed and disinfected ... ... ...	3
New water supply to houses ... ... ...	1
Wells cleansed and supply improved ... ...	5
Wells sunk for new water supply .. ... ...	1
Samples of water collected for analysis ... ...	20
Certificates given under Water Act ... ...	6
Dairies, cowsheds, and milkshops inspected ...	11
Slaughter-houses inspected ... ... ...	9

Buildings erected under Bye-laws:—

Spilsby ... ... ...	5
Sutton-on-Sea ... ... ...	15
Burgh ... ... ..	3
Wainfleet... ... ...	2
Winthorpe ... ... ...	7
Chapel ... ... ...	3
Hogsthorpe ... ... ...	1
Buildings erected in other parts of the district ...	9

The three cases of overcrowding reported were in each case abated by reducing the number of inmates.

During the year I analysed 20 samples of drinking water, and the results were that in 10 cases the

water was classed as good, in 5 suspicious, and in 5 bad.

Under the Factory and Workshop Act, 1891, all workshops and bakehouses have been inspected, and in most cases were found to be satisfactory. A tabular statement required by the Home Office is presented as an appendix to this report.

### VITAL STATISTICS.

In 1906 the Births were 475 and the Deaths 273. The Birth-rate was 24·11 per 1,000 population. The Death-rate was 13·86 which is 1·74 below the average of the last 10 years.

The Death-rate of children under 1 year to 1,000 births was 92·6, and is 2·3 below the average of the last 10 years. The Death-rate for England and Wales for the same age was 133.

The number of deaths above 65 is nearly half the total number.

The Birth-rate in England and Wales in 1906 was 27·0 per 1,000 of the population, which is ·2 per 1,000 below the rate in 1905 and lower than the rate in any other year on record; compared with the average in the ten years 1896—1905, the Birth-rate in 1906 shews a decrease of 1·7 per 1,000. The Death-rate in 1906 was 15·4 per 1,000, which is ·2 per 1,000 above the rate in 1905; compared with the average rate in the ten years

1896—1905, the Death-rate in 1906 show a decrease of 1·4 per 1,000.

The class of Zymotic Diseases contributed 13 to the total list, and these deaths were put down to Scarlet Fever 1, Whooping Cough 3, Diphtheria 5, Puerperal Fever 1, Influenza 1, Erysipelas 1, and Diarrhoea 1, and they have already been alluded to. The Death-rate per 1,000 of the 7 principal Zymotic Diseases amounted to .50. The Death-rate in England and Wales for the same Zymotic Diseases was 1·73.

The Births were distributed according to Quarters as follows:—

	LEGITIMATE.		ILLEGITIMATE.	
	MALES.	FEMALES.	MALES.	FEMALES.
Quarter ending March 31st	60	...	51	...
Quarter ending June 30th	48	...	52	...
Quarter ending Sept. 30th	63	...	56	...
Quarter ending Dec. 31st	70	...	44	...
	—	—	—	—
	241	203	20	11
	—	—	—	—
Total Legitimate	...	444	Total Males	...
„ Illegitimate	...	31	„ Females	...
	—	—	—	—
Grand Total	475		Grand Total	475
	—	—	—	—

TABLE of DEATHS from the Seven Principal Zymotic Diseases during the last 10 years.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Small Pox ...	...	...	...	—	—	—	—	—	—	—
Measles ...	...	...	...	2	1	1	—	—	—	7
Scarlet Fever ...	...	...	...	—	—	—	—	—	—	—
Diphtheria ...	...	...	...	—	—	4	—	2	1	1
Whooping Cough ...	...	...	...	2	3	1	10	2	2	1
Fever, Typhus ...	...	...	...	2	9	—	4	1	5	—
,, Typhoid or Enteric	...	...	...	—	—	—	—	—	—	—
,, Other or doubtful	...	...	...	—	—	—	—	—	—	—
Diarrhoea and Dysentery ...	...	...	...	1	—	2	3	3	—	—
Total Deaths from the 7 principal Zymotic Diseases ...	...	...	8	14	5	13	15	6	10	4
Deaths from other causes ...	...	...	313	363	349	316	299	292	262	308
Total Deaths ...	...	...	321	377	354	329	314	298	272	312
Death-rate per 1000 Zymotic Diseases ...	...	...	·37	·66	·23	·61	·73	·29	·49	·20
Death-rate per 1000 from all causes ...	...	...	15·13	17·92	16·97	15·91	15·22	14·66	13·50	15·51
Death-rate for England and Wales ...	...	...	17·4	17·6	18·3	18·3	16·9	16·3	15·4	15·2
										15·4

In concluding this report I am tempted to make still further reference to Scarlet Fever which this year as of late, in more senses than one, may be looked upon as the special plague of the District, for not only owing to the infectious nature of the disease has it established its claim to the unpleasant designation, but also owing to its illusory and erratic behaviour has it proved itself to be in very deed a plague to Sanitary Officials. Scarlet Fever is a very contagious disease, and the contagious principle possesses certain peculiarities. It is, under favourable conditions, capable of retaining vitality for a lengthened period, and on this supposition alone can be explained the frequent recurrence of outbreaks. It seems in some instances to be disseminated long after the patient has passed the usual term of quarantine. It produces not unfrequently mild and doubtful cases not sufficiently proclaimed to be recognised nor come under medical supervision, and yet show themselves to be capable of becoming potent sources of infection. Lastly, the modes of conveyance of this subtle poison are so many and various as to baffle all endeavours to waylay it in transit. Not unfrequently cases of Scarlet Fever manifest themselves simultaneously in different, often remote, parts of our sparsely populated villages, and no other explanation of such outbreaks can be found than by referring them to the elementary schools as the foci from which they spread. The highly

organised machinery of the Educational Authority for the purpose of enforcing compulsory attendance, together with a wholesome dread of parents at being liable to be brought before Magistrates all tend to bring about a passive obedience which culminates in the admission of mild cases of Scarlet Fever into our schools, for without a medical certificate they cannot be kept away. From an educational standpoint these measures may be necessary and are to be commended, but from a sanitary standpoint they assume a slightly different aspect. It is difficult and may be even presumptuous to suggest a remedy, but if only it could be made a part of a teacher's qualification that he should be indoctrinated in the means of ready and early detection of the infectious diseases of children, and have power to dismiss them from school until his suspicions could be corroborated or otherwise by Medical Authority much good might be done. By securing this special knowledge for the teachers, by close attention to the sanitation of the buildings especially on the lines of ventilation and cleanliness, and by seeing to the proper segregation of the pupils, we may hope to accomplish much towards checking the spread of preventable diseases amongst the children attending our schools. Far be it from me to cast even a hint at fault finding against our Educational Authority in their zealous desire to carry out their laudable duty, but in matters of the kind under consideration it is clear that the two Authorities, the Educational

and the Sanitary, should work together hand in hand so as to bring about the blessing of Education without endangering the blessing of Health.

I have the honour to be, Gentlemen,

Your obedient Servant,

FRANCIS J. WALKER.

SPILSBY,

January, 1907.

TABLE I.—For Whole District.

YEAR.	Population estimated to Middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS.		Deaths of Non-residents registered in District.		Deaths of Residents registered beyond District.		DEATHS AT ALL AGES. NETT.	
		Number.	Rate.*	Number.	Rate.*	Number.	Rate.*	Number.	Rate.*	Number.	Rate.*	Number.	Rate.*	Number.	Rate.*
1896.	21,385	489	22.86	46	94.2	297	13.88	21	5	0	292	13.82			
1897.	21,208	459	21.64	47	102.4	321	15.13	16	3	0	318	14.99			
1898.	21,031	491	23.34	59	120.1	377	17.92	26	1	0	376	17.87			
1899.	20,854	508	24.36	62	122.0	354	16.97	26	2	0	352	16.87			
1900.	20,677	452	21.86	60	111.0	365	17.62	17	2	0	363	15.81			
1901.	20,500	492	24.00	45	89.4	314	15.22	21	3	0	311	15.17			
1902.	20,323	481	23.66	43	89.4	298	14.66	20	1	1	298	14.66			
1903.	20,146	465	23.08	38	81.7	272	13.50	13	1	1	272	13.50			
1904.	20,000	469	23.45	28	59.7	312	15.51	23	2	0	310	15.50			
1905.	19,850	482	24.28	48	99.6	311	15.67	20	1	0	310	15.67			
Averages for years 1896–1905.															
1906.	19,700	478	23.25	47	96.9	322	15.60	20	2	0	320	15.38			
															13.76

\* Rates calculated per 1,000 of estimated population.

TABLE II.

TABLE III.

Notifiable Disease.	Cases notified in Whole District.						Total Cases Notified in Each Locality.							
	At Ages.—Years.			At Ages.—Years.			Spilsby.		Wainfleet.		Burgh.		Stickeley.	
At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.								
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria	...	...	2	16	7	5	1	2	16	2	7	4	...	
Membranous croup	...	...	...	...	...	...	...	...	...	...	...	...	...	
Erysipelas	...	10	...	...	1	4	1	5	1	1	2	1	...	
Scarlet fever	...	70	1	13	36	9	11	23	2	32	9	4	...	
Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	...	
Enteric fever	...	7	...	1	3	...	2	1	3	1	1	...	2	
Relapsing fever	...	...	...	...	...	...	...	...	...	...	...	...	...	
Continued fever	...	...	...	...	...	...	...	...	...	...	...	...	...	
Puerperal fever	...	1	...	...	...	...	1	...	...	1	...	...	...	
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	
Totals	...	119	1	16	56	20	23	3	33	21	36	18	11	

TABLE IV. Causes of, and Ages at, Death during Year 1906.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.					DEATHS IN LOCALITIES (AT ALL AGES).								
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	SPILSBY.	ALFORD.	WAINFLEET.	BURGH.	STICKNEY.	DEATHS IN PUBLIC INSTITUTIONS.	DEATHS IN UNION HOUSE.
Small-pox...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet fever ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Whooping-cough ...	...	...	3	2	1	...	...	...	...	...	...	...	...	...
Diphtheria and membranous group ...	...	...	5	...	1	3	1	...	...	4	...	1	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteric ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other continued	...	...	1	...	...	...	...	1	...	1	...	...	...	...
Epidemic influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	5	4	...	...	...	...	...	...	...	...
Enteritis ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Puerperal fever ...	...	...	...	...	...	5	4	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other septic diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis ...	...	...	18	...	1	1	7	9	...	3	5	2	4	1
Other tubercular diseases ...	...	...	8	1	2	2	3	...	2	2	1	3	...	...
Cancer, malignant disease ...	...	...	23	...	2	1	...	10	13	5	6	7	3	...
Bronchitis ...	...	...	12	2	1	...	...	...	9	7	3	2	2	2
Pneumonia ...	...	...	16	3	3	...	...	4	6	7	3	2	2	...
Pleurisy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of Respiratory organs ...	...	...	1	...	1	...	...	...	...	...	1	...	...	...
Alcoholism }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Venereal diseases ...	...	...	8	8	...	...	...	...	...	1	...	1	3	3
Premature birth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases and accidents of nutrition ...	...	...	3	...	...	...	...	1	2	...	1	...	1	1
Heart diseases ...	...	...	31	...	...	1	1	6	24	9	6	6	6	2
Accidents ...	...	...	7	...	...	1	...	4	2	3	4	...	...	...
Suicides ...	...	...	...	...	3	1	2	32	69	35	26	18	22	14
All other causes ...	...	...	130	23	9	15	16	68	125	74	54	47	49	27
All causes ...	...	273	43	13	9	15	16	68	125	74	54	47	49	22

TABLE V. Deaths from stated Causes in Weeks and Months under One Year of Age.

## APPENDIX.

## RAINFALL FOR 1906.

Month.	No. of days on which 1 or more fell.	Amount in inches.	Average for last 31 years.
January .....	20	3·03	1·97
February .....	16	2·67	1·96
March .....	22	2·58	1·80
April .....	7	·61	1·69
May .....	18	1·82	2·01
June.....	9	1·38	1·78
July .....	7	·44	2·68
August.....	11	2·53	2·91
September .....	11	1·05	2·66
October .....	24	5·09	3·33
November .....	18	3·70	2·71
December .....	19	2·18	2·50
Total .....	182	27·08	